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These concerns are summarized as follows:

- **Ridership and revenue studies in 1996 indicated that Altamont would generate higher ridership and revenue for the system.**
- **Environmental analysis pointed out that Pacheco Alternative route would create more negative environmental impacts than Altamont Alternative.**
- **The Altamont Alternative was dropped from consideration by concluding that the Pacheco Pass has a higher ridership and revenue potential.**
- **A second ridership study was conducted without analyzing the Altamont Alternative route.**
- **With only one alternative (Pacheco Route) that remained for further consideration, the alternatives along the Diablo Mountain Range were introduced.**
- **There is no evidence that the Diablo routes, introduced in 2001, were subject to the same level of comparison as Pacheco was with Altamont and Panoche.**

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In a Memorandum to the San Joaquin Valley Rail Committee (Appendix 10), Ms. Trudy Williams of Transportation Involves Everyone (TIE) questions via analytical research the legitimacy of dropping Altamont before the release of the DEIR/S. Ms. Williams states in her Memorandum that while the 1996-Commission report selected Altamont as a preferred alternative, this proposed route was not considered in the DEIR/S. The Memorandum contends that the Authority "lacked the legal basis for removing the Altamont Pass alternative prior to the completion of the environmental studies" in apparent disregard for Section 185032. (a) (1) of SB1420 and ensuing legislation (AB1703 and SB796) which require that the Authority prepare "a plan for the *construction* and *operation* of a high-speed train network *... consistent with and continuing the work of the Intercity High-Speed Rail Commission conducted prior to 1997 ...".*

The Memorandum also contends that while **Section 185034** of the **California Public Utilities Code** does not prohibit the addition of new routes by the Authority, e.g. the Diablo Alignments, that document contains no language that gives power to the current Authority to remove routes identified in the 1996 report by the Commission. Furthermore a second TIE Memorandum presented to the San Joaquin Valley Rail Committee points out that the Authority's removal of the Altamont Pass alternative prior to issuing the final draft of its Business Plan in June of 2000 may also be in "violation of or at least challengeable under the **California Environmental Quality Act (CEQA), Section 15126.6,**" which states that all feasible routes should be considered in an EIR/S

2.1.2 Cost Analysis

According to the DEIR/S, the Pacheco Pass was estimated to cost $2 billion more than the Altamont Pass. The DEIR/S confirms that this cost difference was overstated due to a miscalculation of the cost of a new Dumbarton Bridge that was estimated at only $300 million. With the new estimation, the DEIR/S analysis assumes that the estimated cost of a new Dumbarton Bridge would range from $1.1 to $1.4 billion, instead of $300 million, based on the unit cost assumptions from the San Francisco Metropolitan Transportation

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Commission. The disparity in the cost estimates between the Altamont route and the proposed Diablo/Pacheco routes raises several concerns:

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1- Imprecise Assumption:
According to the Authority's analysis, the estimated cost of $1.1 to $1.4 billion is for a new bridge that would replace the existing 6-lane-highway Dumbarton Bridge, including a 25% contingency and 25-30% project delivery costs (Korve/Parsons Brinckerhoff 2002). However, these estimated costs would be too high to be applied to the new Dumbarton Bridge since they were estimated for a bridge to be constructed to the north of the San Mateo-Hayward Bridge. The estimate was for a new bridge that would clear the navigation channel by 135 ft above the sea level and incorporate a long main span of approximately 850 ft long, which is roughly the same clearance and span as that of the existing San

Mateo-Hayward Bridge. However, the existing Dumbarton-Highway Bridge only requires a clearance over the main channel of 85 ft and a span of 340 ft, which should be applied similarly to the new HSR Bridge.

USING THE COST INDEX (*PLEASE REFER TO*

Appendix 3), the construction cost of the existing 8,600 feet-long 6-lane highway Dumbarton Bridge, which was $70 million in 1984, would be about $111 million, when converted to 2003 dollars. As set forth below, the total cost of the 29,000 ft-long total structure of this bridge, which includes the Newark slough bridge and the low-level trestle over marshland, will be about $374 million. Note that the construction costs per unit length for the Newark Slough Bridge and the low-level trestle over marshland should be much less costly than that of the main channel bridge. Also, the width of the existing Dumbarton Bridge is about 85 ft, while the HSR requires the width of only about 45 feet – nearly half of Dumbarton-Bridge width. This means that the new bridge for the HSR will have much smaller and more lightweight superstructures and thus requires smaller-scale substructures than the existing Dumbarton Bridge.

This suggests that the $1.1 billion-to-$ 1.4-billion estimated cost for the Bay crossing is unreasonably high. Therefore, a precise cost analysis is required to evaluate objectively the Altamont route and compare it with the Diablo/Pacheco routes.

The cost analysis of the bridges in the Bay area showed up the following results:
Bay Bridge East Span
The new Bay Bridge East Span is estimated to **cost $2.6 billion**. This includes seismic upgrades, new ramps, a skyway and a new suspension bridge. The new suspension bridge has the world's first single-tower self-anchored suspension span over the shipping channel and some of the largest and heaviest components ever seen in bridge building. In addition, the cost of the new Bay Bridge East Span project includes the construction of the Yerba Buena Transition structures: the detour to maintain traffic flow during construction, and the removal of the existing bridge.

Carquinez Bridge
The new Carquinez Bridge, a two-pier (314 ft in height) suspension bridge allowing an approximate channel span of 2,400 ft and a vertical clearance of 148 ft. Construction of the Carquinez Bridge ended in the fall of 2003 with a total **cost of $220 million**.

Existing Dumbarton Rail Bridge rebuilding
The Authority assumes that the existing Dumbarton Rail Bridge and Newark Slough Bridge structures and approaches would remain for other passenger/commuter rail uses. However, rebuilding the existing Dumbarton Rail Bridge, located just south of Dumbarton Highway Bridge, to accommodate the commuter rail along with the HSR could be an option for the Bay crossing. Estimations for rebuilding the existing Dumbarton Rail Bridge including rehabilitation of the damaged existing rail bridge as well as purchasing rolling stock (trains) and various East-Bay track improvements were at **$180 million** (Korve/Parsons Brinckerhoff 2002).
Although the existing rail bridge was designed to accommodate trains with 80-mph speed, it would be appropriate to consider a new design that is suitable for both the commuter rail and the HSR. If this option is possible, environmental impacts and consequent environmental mitigation costs must be reduced significantly. Indeed, new construction could have less impacts on the wetlands, and there may be some mitigation gained from dredged material being used in the south bay salt ponds. Therefore, if the rebuilt bridge is assumed to have the same constraints on channel navigation width and clearance as those of the existing Dumbarton Highway Bridge, it actually may be the inexpensive choice making the rehabilitation alternative plan worth consideration.
(Please refer to Appendix 1 for a comparison of the specifications of the Bay Area Bridge)

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cont

2- Insufficient Cost Analysis to Either Drop Altamont Route or Consider the three Diablo Routes

As explained above, the assumption that the Bay crossing would cost $1.1 to $1.4 billion was not adequately calculated in the DEIR/S and the supporting studies. Therefore, we find that the provided studies and analysis do not support the fact that Altamont Pass option is dropped from consideration and alternative routes along the Diablo Mountain Range are carried forward. This is especially unjustified when considering the excessive tunneling work that these three alternative routes entail with the high rate of cost and safety uncertainty.

Tunnel Cost:
During the tunneling conference held in 2001[i], the Authority conducted a revision of the tunneling unit cost for the tunnel segments along the proposed Diablo/Pacheco routes. Considering, among other factors the inflation rate, the revision resulted in an increase of the estimated "Twin-Single-Track TBM <6 miles"[3] from $ 76.6 millions/mile to $ 107.7 millions/mile. In the Draft EIR/S study, this estimated increase was readjusted to the September-2003 dollar value. The cost after the readjustment is $ 114.5 millions/mile, which is equivalent to 6.27% increase from the cost estimated in 2001.
Based on the original estimated tunneling-unit cost in the Business Plan[ii], the cost of the previously proposed Altamont Pass route was $ 2 billion less than the

[3] Twin-Single-Track TBM <6 miles: Refers to the description of type of tunnels. It is composed of two tunnels, each having a single track. The tunnels are excavated using tunneling boring machines. The length of the tunnel is shorter than 6 mile.

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Based on the original estimated tunneling-unit cost in the Business Plan[ii], the cost of the previously proposed Altamont Pass route was $ 2 billion less than the

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cont

Pacheco-Pass option. **Since the tunnel segments in all of the proposed Diablo/Pacheco-Pass options are longer than the tunnel segments of the Altamont Pass, it is reasonable to assume that this cost difference will be more significant with the new estimated tunneling-unit cost.** Indeed, the difference between the total tunneling costs for the Pacheco-Pass options and the Altamont option would be between $ 214 million and $ 500 million, depending on the total tunnels' length in each route option.
The impacts of the increase of the tunneling unit cost are shown in Table 2-1

Table 2-1 - 1**Impacts of the Increase of the Tunneling Unit Cost**

	Diablo Range Direct			Pacheco Pass		Altamont Pass
	Northern Tunnel	Minimize Tunnel	Tunnel under Park	Via Gilroy	Via Gilroy Bypass	
Total Tunnel Length	19 miles (31 km)	16 miles (26 km)	20 miles (32 km)	10 miles (16 km)	12 miles (19 km)	6 miles (10 km)
Increase of Tunneling Unit Cost	$23.8 million /km (71.1 - 47.3 million /km)					
Increase of Tunneling Cost	$738 M	$619 M	$762 M	$381 M	$452 M	$238 M
Relative Increase of Tunneling Cost (Comparison with Altamont Pass)	$500 M	$381 M	$524 M	$143 M	$214 M	–

The total tunnel length of Altamont Pass Alignment is assumed to be 6 miles (10 km). The total tunnel lengths of other alignment options are based on the table on Page 6-10, "Draft Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the proposed California High-Speed Train System", California High-Speed Rail Authority and U.S. Department of Transportation Federal Railroad Administration, January 2004.

The technical construction concerns that we are listing below were not analyzed in the Draft EIR/S. We assume that they increase the rate of uncertainty of tunnel construction and mitigation costs.

Tunneling
Our review of the estimated tunneling-unit costs raised the following technical observations and concerns:

- Tunnel boring machines (TBM) are assumed to be the proposed excavation method for all the tunnels between Bay Area and San Joaquin Valley. The previously assumed advance rate of TBM was 50 feet/day (HSRA 2004). Although the adjusted assumption is 30 feet/day, this is still a very optimistic calculation.

- The tunnel conference suggested that shielded boring machines would be required due to high potential of encountering methane deposits and high-pressure groundwater. If shielded boring

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machines are used, a loss in progress rate is expected due to the increased friction between the skin plate and the ground.

- The efficiency and the safety during the frequent exchanges of worn disc cutters and cutter bits under such conditions as high-pressure groundwater should also be taken into account.

- Pre cast concrete liner segments are suggested for use as a lining/support system. However, equipment such as segment assembly units and the segment transportation system will add to the cost of tunnel construction.

- TBM has been mainly used for relatively small tunnels (Diameter < 3m) and there are few previous construction projects using TBMs with diameters of more than 10-meter width. Due to the lack of enough experience, unforeseeable technical problems during excavation will occur and thus disruptions and delays will affect the construction schedule and cost. Also, if encountering ground that cannot be excavated by TBM halfway into the tunnel, it will be difficult and very costly to change from the TBM method to any other method such as the Drill & Blast method. In addition, if the Drill & Blast method is chosen as an alternate excavation method, the advance rate decreases considerably (less than a third of the TBM method) and the construction cost will be much more expensive than that of the Authority's estimate which assumes the use of the TBM method for most of the tunnels of the proposed HSR.

Magnitude of the earthwork volumes that may result from the tunneling operation

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In addition to tunneling cost, earthwork cost is another major cost element for the sections in mountainous areas. The earthwork (cut/fill) volumes and costs in some segments are exampled in *Appendix 2*. As shown in the left four columns of *Appendix 2*, cut/fill costs in the segments which pass through mountainous regions between Bay Area and San Joaquin Valley account for 20-35% of the construction cost. On the other hand, cut/fill costs in the segments in relatively flat areas, such as the segment shown in the right column of the table, account for much smaller percentages. **The large differences in earthwork volumes exhibit the magnitude of environmental effects of the construction in mountainous areas.** The cut/fill volumes (and thus the cut/fill costs) per at-grade section length in the segments in mountainous areas (left four columns of the table) are 27-49 times as large as that in "Revised Merced", which passes through relatively flat area.

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cont

According to the segment cost breakdown by the Authority, the approximate assumption of either 8.3m^2 or 30.48m^2 cut/fill cross-section – an assumption of 1m depth of cut/fill by either 8.3m or 30.48m width – is applied to the calculations of cut/fill volume in most of the segments, of which an example is shown in the right column in *Appendix 2*. A more precise, digital terrain model (DTM) was applied only to several segments passing through mountainous areas (*such as shown in the left four columns of* Appendix 2).

Considering the magnitude of cut/fill volume in estimating construction costs, the assumption of the constant cut/fill cross-section seems too rough. More precise method such as DTM should be applied to the calculation of cut/fill volume for all the segments. Furthermore, although the Authority says that the approximate estimate of the construction cost for Altamont Pass was carried out, it is unknown what assumptions were applied to the calculation of the earthwork volume. The DTM or other equivalent method must be applied to Altamont Pass, too, in calculating cut/fill volume for more accurate cost estimate and more reliable cost comparisons with other alternatives.

Construction Sites

The development of construction sites around the tunnel portals (used for material yard, muck disposal and loading area, various plants and equipment, site office, etc.) is another concern. The effects on environment due to the development of these construction sites will not be negligible, regardless of the tunneling methods. In addition, the

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construction of access roads from existing roads to these sites will also entail severe and possibly permanent environmental damage. **The method of the development, number, areas, locations of these construction sites as well as access roads, and those environmental impacts should be studied and included in the Draft EIR/S.**

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As shown above, a more thorough analysis and presentation of assumptions of tunnel technical specifications are needed to provide a reasonable estimation of the projected costs of the proposed alternative options.
Additionally, with such an excessive tunneling and earthwork requirements, the three proposed northern routes do not seem to present better conditions than the dropped Altamont option. It is therefore imperative to study adequately the cost and construction conditions of these northern routes, in comparison with a detailed cost analysis for Altamont prior to the selection of a HSR corridor between the Central Valley and the Bay Area.

3- Mitigation Cost:

According to the Authority, the environmental mitigation costs for the Altamont Pass (e.g., wetland replacement) could reach $1 billion. This is an estimated mitigation cost equal to 100% of the construction cost that was initially overstated as explained above. However, the Authority's estimate for mitigation costs along all the proposed HSR segments is 3% of the construction cost, regardless of the potential

degree of environmental impacts in each segment. **With this significant disparity in calculating the cost of mitigation, it is imperative to revise the Draft EIR/S and evaluate the potential mitigation cost for each proposed alternative option, using the same criteria for alternatives and including the Altamont Pass.**

2.1.3 Mitigation Analysis

The Altamont Pass would impact sensitive wetlands of the Don Edwards San Francisco Bay National Wildlife Refuge. However, all of the proposed Diablo/Pacheco alternative routes would impact several unique sensitive and pristine habitats and disturb wildlife (*Please refer to the Biological Resources and Aesthetic section, of this response letter, for a detailed description of the environmental-impact concerns along the Pacheco Pass alternative options*). The Draft EIR/S does not provide an accurate description and estimation of the mitigation measures for the proposed Diablo/Pacheco alternative routes. Besides the presence of several sensitive habitats, and threatened and endangered species, the Draft EIR/S does not consider the impacts and relevant mitigation measures of the fragmentation of habitats, biodiversity and the adverse impacts of creating new right-of-ways in rare, pristine and undisturbed areas.

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Additionally, it is important to note that the proposed **Hayward/Niles/Mulford Alignment** that would link San Jose to Oakland would traverse 4 miles of the Don Edwards San Francisco Bay National Wildlife Refuge. **While this alternative route has been carried forward for further study, we find it inconsistent and unjustified to have dropped the Altamont option before undertaking a detailed environmental analysis.**
Furthermore, although the DEIR/S states that it might be difficult to find meaningful mitigation measures for the impacts arising from the Minimized Tunnel Alternative, which passes through Henry W. Coe State Park, the DEIR/S still preserve such alternative. Conversely, the purported mitigation costs of the Altamont Alternative led to the removal of this route from consideration.

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2.1.4 Ridership and Operations

The DEIR/S assumes that the San Joaquin County population represents a short-distance market. Conversely, the ridership analysis estimates that 68 million passenger would be

using the train of whom only 10 million passenger are long distance travelers. The population map below shows the population along the Altamont corridor and the Pacheco corridor. The Altamont corridor is obviously more populated than the Pacheco corridor. While the passage of the HSR along the Altamont corridor would serve the populated area of San Joaquin County for short and long-distance travels, a train going through the unpopulated corridor of Pacheco will only serve to promote sprawl.

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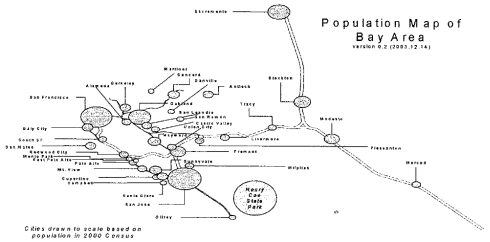

Population Map of the San Francisco Bay Area. 2000 Census.

2.1.4.1 DEIR considers only long-distance usage of the proposed infrastructure of the HST

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In order to determine the utilization of the HSR system, the California High Speed Rail Authority estimated an operating schedule in the June 2000 Business Plan. This operating schedule is focused on trains that will compete directly with airlines for medium distance travelers. For California, this means travelers traveling between the major cities, such as Sacramento, San Francisco, Los Angeles, or San Diego. The DEIR fails to include ridership from trains operated by other transit agencies that would reasonably wish to offer shorter distance commuter services.

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Assertions:

Most passenger rail projects are intracity or short-range commuter rail operations of less than 25 miles and constructed with the assumption that there will be only one operator using the rail extension or improvement. For example, it is a reasonable assumption that only BART will operate along the Daly City-SFO Airport/Millbrae extension that was recently completed.

However, all Class I railroads in the United States, such as Union Pacific and Burlington Northern, have interoperability agreements with each other, in order to avoid the cost of

construction or maintenance that duplicates existing infrastructure. These agreements allow railroads to operate over tracks owned and maintained by another railroad. Dispatching trains is handled by the owning railroad.

The scale of the HSR system is more comparable to the construction of an entirely new Class I railroad than a subway or light-rail project that is the more usual passenger-only rail project.

The HSR project is unique among most rail projects due to its extensive 700-mile length and $33 billion estimated cost. This makes it the most expensive single civil engineering project in the United States, exceeding even the final cost of Boston's infamous Big Dig project. The length and cost of the project make it reasonable to expect that any infrastructure built as part of this project be utilized to the maximum extent possible.

The Authority has determined that the majority of its operating profit will be from the operation of endpoint-to-endpoint trains offering service that will compete with the equivalent airline routes. An operating profit is the planned revenue source for planned extensions to the initial San Francisco-Los Angeles route. This assumption has resulted in the Authority considering commuter utilization of the HSR system an incidental, insignificant portion of its revenue stream.

DEIR's stated purpose and related assumptions:

"*The purpose of the HSR system is to [link] the major metropolitan areas of the state. A further objective is to provide an interface with ... mass transit and the highway network and relieve capacity constraints of the existing transportation system.*" That is to say the purpose of the proposed project is the construction of an infrastructure project. How the

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project will be utilized, once constructed, is an important component of the justification of the construction.

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As part of its justification the Authority is assuming that:

1. It or a successor agency will be the sole operator;
2. As specified in the Authority's June 2000 Business Plan, the constructed infrastructure will be utilized solely for 98 trains/day that mostly travel between the endpoints of the system, San Francisco and Los Angeles;
3. Any commuter usage of the line will utilize only the proposed 98 endpoint-to-endpoint trains operated by the authority.

Fallacies in the Authority's assumptions

In light of the high cost and length of the system the Authority's assumptions are unreasonable and inconsistent with the stated purpose of relieving "capacity constraints of the existing transportation system."

First, the assumption that the Authority will be the sole operator on the HSR infrastructure, ignores the attractiveness of the HSR infrastructure to commuter rail operators that have no concerns about operating profit. Once the rail infrastructure is complete, the cost to a commuter rail operator to use the HSR infrastructure is reduced to purchase of a minimal set of compatible rolling stock, trackage rights, insurance, and labor costs – the vast majority of the capital improvements having already been incurred and paid for by the Authority. Indeed, if the San Joaquin Rail Authority desired to run a train from Fresno to Sacramento or Stockton to San Jose, it would be very attractive to utilize the HSR infrastructure. It would also be difficult for the Authority to justify denying the San-Joaquin-Rail Authority access to the HSR infrastructure.

Second, endpoint-to-endpoint trains have peak travel times different from the local commute peak demand patterns. For example, commuters from Bakersfield to Burbank would have few choices. In the June 2000 plan schedule (refer to *Appendix 11*), the morning commute choices are 5:00am, 7:31am, or 8:56am(San Francisco-San Diego schedule as listed in the 6/2000 Business Plan). Bakersfield to Los Angeles Union Station is only slightly better – an 8:36 am train is also available. This is clearly inadequate for any Bakersfield commuters. Therefore, it is quite reasonable to expect that a transit agency will desire to establish a commuter service to fill the gap. The Authority's schedule indicates that the southbound direction in this portion of the system, will be lightly used during the early-morning weekday hours.

While a Bakersfield to Los Angeles commuter run is speculative at this point, the Altamont Commuter Express (ACE) train has been operational for over 4 years now. If the Altamont Pass (I-580) corridor was chosen to connect the Bay Area with the Central Valley, it is reasonable to expect the ACE train to be run within the same right-of-way.

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Ridership projections were listed as part of the reason to eliminate the Altamont Pass (I-580 corridor) from consideration. Because the DEIR/S does not consider reasonable dual-use scenarios by other transit operators, this justification is highly questionable. The ridership portion of the DEIR/S needs to be revised for each corridor choice taking into consideration current commute patterns to determine reasonable additional non-Authority provided services that will utilize the HSR infrastructure.

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2.1.4.2 Specious Operational Issues

The capacity of a given section of HSR right-of-way is measured in terms of trains per hour. This capacity is not affected by the train length and passengers seats. Thus, in order to increase the passenger capacity of the system, multiple joined train sets, bilevel cars, or longer train sets are all viable methods.
Multiple train sets offer operation flexibility by allowing a single departure from the originating station to service multiple scattered final destinations. On page 2-36 of the

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DEIR, a footnote[4] describes in detailed length the requirements to split successfully a High Speed Train.

[4] The existing Dumbarton rail bridge is a single-track drawbridge that could not be used for HST service. Furthermore, the existing rail alignment leading to the bridge has severe speed restrictions that would require a new alignment through the wetlands approaching the Bay. The concept of serving San Francisco and avoiding a Bay crossing via San Jose was considered. This concept would require trains to reverse direction at a stub end station in San Jose (minimum 10 minute additional travel times) to proceed north along the peninsula. This would add at least 22 minutes to the overall travel time versus using a Pacheco Pass option and would not meet the project purpose and objectives. (DEIR/S, footnote Page 2-36)

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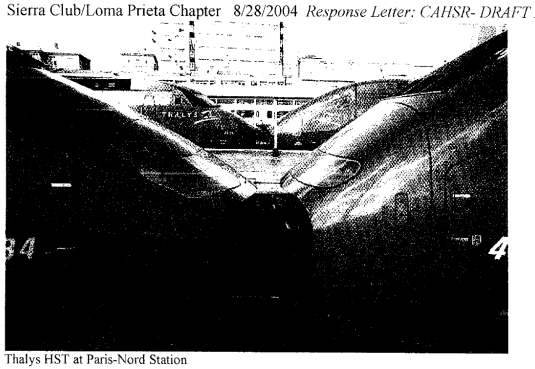

Thalys HST at Paris-Nord Station

While factually correct, the length of this footnote is misleading as this implies that High Speed Train (HST) splitting is a difficult task. HST splitting is not difficult as demonstrated by the above image, which shows two joined Thalys train sets[5]. As can be seen from the map below, the operators of the Thalys-HST route need to service two scattered final destination cities, Amsterdam and Cologne. The operators of the California system will face the same situation of servicing Sacramento and San Francisco from Los Angeles. Twenty-two times every day, the Thalys operators join and separate two train sets. As can be seen from the Thalys schedule (refer to *Appendix 12*), it takes less than 5 minutes to perform this task.

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[5] A trainset is a complete operating unit composed of two end cars with a fixed number of trailer cars between the end cars. A trainset isjoined together at a yard and is a time-consuming operation.

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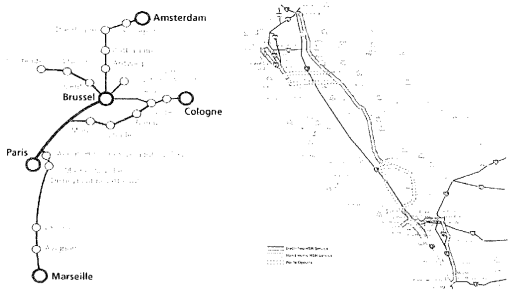

While the DEIR/S ignores the usefulness of train splitting to service Los Angeles-San Francisco and Los Angeles-Sacramento with a single Los Angeles departure, it is unreasonable to expect that the California HSR-system operators will do so. Therefore, the discounting of trains-splitting is specious, both in general and in specific, as a reason to exclude any alternative route choice.

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2.1.4.3 Three-way split argument against the Altamont

In order of Altamont to service the three major cities of the Bay Area, the DEIR/S argues that this would require three different routes going three separate directions: north to Oakland, west to San Francisco and south to San Jose.

This faulty argument centers on a faulty assertion. This will result in a reduced service to each of the city centers. If 18 trains are entering the Bay Area, service to individual cities appears to be reduced through Altamont Pass routing when compared to the Pacheco Pass routing.

Bay Area City	Pacheco Pass routing	Altamont Pass routing
San Jose	18 trains	6 trains
San Francisco	9 trains	6 trains
Oakland	9 trains	6 trains

This assertion ignores that the proposed system's capacity is 20 trains/hour/direction and that even at 'only' 6 trains per hour this is more frequent that the current BART (Bay Area Rapid Transit) or Caltrain schedule.

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Based on the cost, mitigation, and ridership factors, mentioned above, it is imperative to compare all the alternatives, including Altamont Pass, between the Bay Area and the Central Valley, through an evaluation of the construction and operational costs, environmental impact, potential mitigation measures, and ridership.

2.2 Additional Concerns with Respect to the Proposed Diablo/Pacheco Alternative Routes

This table of the Draft EIR/S compares the physical and operational characteristics and potential environmental consequences associated with the HSR. Passages that raise a concern have been selected and corresponding responses are stated in bold in this table.

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